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MARX AND THE DOMINATION OF NATURE

Alienation, Technology and Communism

by

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MARX AND THE DOMINATION OF NATURE¹

Alienation, Technology and Communism

Abstract

This paper addresses a problem which seems to be remote from marxist theory: the domination of nature in modern capitalist societies. It attempts to show that the concepts human nature, technology, and alienation form the key concepts for such an analysis. It thus takes a clear standpoint against an orthodox interpretation of Marx, be it concerned with class-theory, accumulation process or the exclusively "structural" aspects of his work. It is not Marx as Political Economist, but Marx as a philosopher and social scientist who is of interest here. Furthermore, the paper attempts to show how these key concepts are linked to Marx's communist perspective. It will be asked if this part of his theory is a viable one especially in the light of some recent criticisms. Marx as a critic of capitalism derives his critique not only from his analysis that capitalism is ultimately inefficient but also that it is inhuman. This ethical orientation is encapsulated in his theory of human nature. It will be argued that this ethical dimension prefigures Marx's model of a communist society. Thus Marx's theory of human nature and communism are inseparably linked together. The paper falls into two parts. The first deals with problems connected to Marx's theory of human nature and alienation; the second part deals with problems connected to the project of communism. In the conclusion I will make some short remarks about Marx's stance between enlightenment and romanticism.

Introduction

Marx claims, that man's production in every society is above all self-creation ("Selbsterzeugung", "Vergegenständlichung seiner Wesenskraft") and the transformation of outward

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1. I would like to thank Iring Fetscher, Maurizio Viroli and Werner Maihofer for their comments on earlier drafts of this paper. I am especially indebted, however, to the encouraging help of Steven Lukes.

nature (Stoffwechsel). In order to do so, man has always used tools as mediators between himself and nature. In analyzing capitalist society Marx shifts the attention to the industrial work-process, commodity production, value and surplus-value creation, to machines, division of labour and the process towards automation. I shall restrict my argument to those aspects of the problem which concern the metabolism man-nature and leave aside the aspects of value production.² Whilst I restrict my analysis to the use-value aspects, this is not to say that there are not other ways to look at the problem - one could mention, for instance, the orthodox interpretation of Marx which concentrates on the aspects of capital and surplus-value production, the accumulation process, class-interests and class-struggle etc. In this perspective it is the market economy with its profit-mechanism which inevitably leads to the destruction of nature; once this is replaced by the principle of state-planning, the roots of the problem will be eliminated. I admit that this claim can be derived from Marx's own analysis - we might call it the 'standard interpretation'. However, it will be shown that this standard-interpretation neglects an other important method of argumentation in Marx. The standard interpretation relies mainly upon the categories of marxist Political Economy, to which the

2. See Schmidt (1971) for a similar approach.

labour-theory of value is central.³ Even granted that this theorem is not defective or that it can be reformulated in such a way, I do not think that we can reach illuminating insights on its basis with respect to ecological problems. Consequently, this paper tries to employ a more philosophically inspired approach. As we shall see, the influence of Hegel⁴ and Feuerbach⁵ is of decisive importance here.

The guiding thread of my discussion consists of the following elements of Marx's theory: (a) the relation between man and man; (b) the relation between man and nature, which is possible only via mediation: man masters nature by means of (c) labour. Since Marx excludes all forms of "Robinsonades" from his analysis, the process of production is social, i.e. the relations of man-nature correspond to a relation man-man and a division of labour. Or, in other words: the relation man-nature is a relation

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3. The criticisms of this theorem are uncountable. For a contemporary critique of this theorem see Morishima (1973), Steedman (1977), and Roemer (1985).
 4. There are different accounts for Hegel's influence on Marx. The importance is stressed by Lukacs (1923), Marcuse (1941), Avineri (1968), Fetscher (1985); it is denied or played down by Althusser (1970), Della Volpe (1950) and Colletti (1976). See Anderson (1976) for a good account.
 5. For an account of Feuerbach's influence on Marx see Tucker (1961); Schuffenhauer (1965); Maihofer (1968) and Wartofsky (1977).

society-nature. Connected with the concept of labour we get the concept of (d) "dead labour": tools, machinery, technology. Because (under certain conditions) man's own products appear to him as alien powers, we obtain (e) the alienation of man. Because the relations between men (under certain conditions) appear as things, we obtain (f) fetishism.

PART ONE: ALIENATION

A conceptual clarification

First of all, it seems useful to make a conceptual clarification.

How can we understand the concept of "Domination of nature", a concept which since the time of the Renaissance⁶ has acquired more and more importance in scientific, philosophical and political discourse?

To be sure, Marx was a follower of Bacon and Descartes who hold that man by means of his scientific knowledge of the laws of nature may become 'maître et possesseur de la nature'.⁷ But Marx is aware of the problem of anthropomorphizing nature, as implied in the very term

6. Cf. W. Leiss (1972:36)

7. Cf. Grundrisse:705, Capital 1:390 for the master aspect. In regard to the aspect of possessing nature, Marx in Capital 3 makes the following statement: "From the standpoint of a higher economic form of society, private ownership of the globe by single individuals will appear quite as absurd as private ownership of one man by another. Even a whole society, a nation, or even all simultaneously existing societies taken together, are not the owners of the globe. They are only its possessors, its usufructuaries, and, like boni patres familias, they must hand it down to succeeding generations in an improved condition." (776)

"domination of nature" (a problem which did not trouble many authors before him)⁸:

"Basically the appropriation of animals, land etc. cannot take place in a master-servant relation, although the animal provides service. The presupposition of the master-servant relation is the appropriation of an alien will." (Grundrisse:500, my emph.)

How, then does Marx define man's relation to nature, if there is no alien will to be broken? The answer may seem very trivial at first sight. He defines the relation of man and nature as a dialectical one⁹ where man/nature is the subject/object. On the one side man is part of nature, his Stoffwechsel with nature is part of natural transformation, his labour is part of natural energy; on the other side man transforms nature in accordance with his own needs, "he opposes himself to nature as one of her own forces, setting in motion ... the natural forces of his body, in order to appropriate nature's productions in a form adapted to his own wants. By thus acting on the external world and changing it, he at the same time changes his own nature. He develops his slumbering powers and compels them to act in obedience to his sway." (Capital 1:177)

8. Descartes himself had no reason to trouble himself in using this metaphor, since nature for him was essentially a spiritless machine.

9. See Leiss (1972) and Schmidt (1971)

"Domination of nature" hence does not mean the breaking of an alien will but the (practical) appropriation of nature according to man's wants.¹⁰ Since human beings have the capacity to reflect and to act in a conscious way, they develop also a theoretical relation to nature, science being the modern expression of it.

The practical and theoretical aspects converge in the notion of technology which is, according to Marx, science applied to the industrial process.¹¹ But it is also the active

10. It seems to me that Marx used two notions for analyzing man's relation to nature: domination and property; cf. GR:706 where Marx speaks of man's "mastery over nature" and his "participation in nature". The first notion refers to the development of science, technology and industry, the second to pre-class societies. Here Marx uses the term property to analyze the relation man/nature in the following way: "Property thus originally means no more than a human being's relation to his natural conditions of production as belonging to him, as his, as presupposed along with his own being; relations to them as natural presuppositions of his self, which only form, so to speak, his extended body." (GR:491) Things change as soon as the conditions of production are no longer presupposed, but the result of previous transformations.

11. "The principle which it pursued, of resolving each process into its constituent movements, without any regard to their possible execution by the hand of man, created the new modern science of technology. The varied, apparently unconnected, and petrified forms of the industrial processes now resolved themselves into so many conscious and systematic applications of natural science to the attainment of given useful effects." (Capital 1 (L&W):456-7)

relationship of man to nature.¹² The first is characteristic for the epoch of modern industry, the latter is characteristic for the human condition in general. The more man succeeds in transforming nature by means of technology, the more

nature becomes purely an object for humankind, purely a matter of utility; ceases to be recognised as a power for itself; and the theoretical discovery of its autonomous laws appears merely as the ruse so as to subjugate it under human needs, whether as an object of consumption or a means of production.
(Grundrisse:410)

In the tradition of Enlightenment philosophy Marx shared belief in the possibilities of science and technology. We shall see if he underestimated the possible side-effects which result from an ever wider and accelerated use of technology.

According to Marx, capitalism displays a decisive feature - fast development of the productive forces, which he sometimes described as a trend towards automation. Intentionally or not, technologies were developed by mankind

12. "Technology discloses man's mode of dealing with nature." (Capital 1:372) "Die Technologie enthüllt das aktive Verhalten des Menschen zur Natur..." (Kapital 1:393)
"But just as man requires lungs to breathe with, so he requires something that is work of man's hand, in order to consume physical forces productively."
(Capital:386)

to increase the degree of domination over nature, to produce more goods in the same time unit, in Marx's words: to reduce the necessary labour¹³, to develop man's needs and pleasures and the possibilities of fulfilling them. As a result, however, this means may become an end in itself: technology masters man rather than vice versa. As we shall see there are three main alienating causes which are of special interest here: the conditions of private property, "dead labour" and the division of labour, to each of which I shall turn below. Jon Elster has given a definition of alienation which grasps the sociologically important features of the concept and which I shall use as a first approximation to the problem:

Men are alienated ... from the aggregate result of their activities when (i) they do not realize that the aggregates are the result of their own activities and (ii) they are unable to control or to change the outcome... It should be emphasized that even when (i) does not obtain, (ii) may be true. Men may well know that their own social environment is the product of their own behaviour, and yet be unable to control it. This can happen if they know that but not how their actions generate the aggregate features that they deplore. This is not a trivial insight." (Elster, 1985: 100-1)

This feature of modern societies becomes dramatic when man

13. As Steinworth (1977) has shown, it is possible to construct the whole argument without using Marx's theory of value

has at his disposal¹⁴ technical means and possibilities to change nature in ever shorter time limits and also in an irreversible manner.

Human Nature at the Centre

If we talk about alienation, a "true" human being which then becomes alienated is always presupposed. This reference point, which is of logical necessity, is present in Marx's work too. It has to be identified in his theory of human nature.¹⁵ As Norman Geras in a most detailed and convincing study has shown, Marx throughout his writings adhered to such a thing as "human nature". To support this claim, he makes over a hundred references to Marx's works. I shall repeat only a few of them. In the Holy Family of 1844 Marx accuses Bruno Bauer of sublimating "all that affirms a finite material existence outside self-consciousness. What he combats ... is ... nature; nature both as it exists outside man and as man's nature." (CW 4: 141) In the German Ideology of 1845 Marx criticises Christianity: "The only

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14. This phrase should not be taken at face value; as will become clear below, this process has to be understood rather as a result of unintended consequences than as the conscious result of human agency
 15. A recent critique of Marx's philosophical anthropology by G. Cohen will be discussed in part two, below

reason why Christianity wanted to free us from the domination of the flesh and 'desires as a driving force' was because it regarded our flesh, our desires as something foreign to us; it wanted to free us from determination by nature only because it regarded our own nature as not belonging to us." (CW 5: 62) In the Grundrisse of 1857 he speaks of wealth, stripped of its bourgeois form, as the "full development of human mastery over the forces of nature, those of so-called nature as well as of humanity's own nature." And he links this to "the absolute working-out of [man's] creative potentialities", which "makes this totality of development, ie. the development of all human powers as such the end in itself." (Grundrisse:488) In Capital 1 he polemicizes against Bentham and his principle of utility, and concludes: "... he that would judge all human acts, movements, relations, etc. according to the principle of utility would first have to deal with human nature in general, and then with human nature as historically modified in each epoch. Bentham does not trouble himself with this. With the driest naivité he assumes that the modern petty bourgeois, especially the English petty bourgeois, is the normal man." (cited in Geras:79-80).

Finally, in Capital 3 Marx, distinguishing the realm of freedom from that of necessity, writes: "Freedom in this field [the field of material production, R.G.] can only

consist in socialized man, the associated producers, rationally regulating their interchange with nature, bringing it under their common control instead of being ruled by it as by the blind forces of nature; and achieving this with the least expenditure of energy and under conditions most favourable to, and worthy of, their human nature." (C 3:800) The evidence that Marx holds a specific view of human nature seems clear and abundant. And yet, one interpretation of Marx, namely the one of Althusser and his followers, has denied exactly this. The main candidate for a rebuttal of this 'humanistic' element in Marx is the sixth Thesis on Feuerbach, the second and third sentences of which read as follows: "But the essence of man is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations." As Geras shows, however, this can by no means be taken as support for the 'anti-humanist' interpretation of Marx. I do not want to go into more detail here, much less a textual analysis, since Geras has made the case clear enough (see Geras 1983: 27-87) Up to now we have listed a number of statements on human nature which are explanatory in character. Additionally, Marx employs the concept in a normative sense¹⁶. He not only

16. For a distinction between the terms "normative", "ethical", "evaluative" and "practical" see Williams (1983:135). For my purpose it is sufficient to get the distinction between "explanatory" and its (Footnote continues on next page)

holds that there exists something like a human nature, but, moreover, he qualifies this. The substantial part of his concept of human nature is contained in his notion of labour as free, creative activity. In the Paris Manuscripts he distinguishes men from animals by defining their species character:

Free conscious activity is man's species character... The animal is immediately identical with its life-activity... Man makes his life-activity itself the object of his will and consciousness... Conscious life-activity directly distinguishes man from animal life-activity... Admittedly animals also produce. They build themselves nests, dwellings... But man in the working up of the objective world... duplicates himself not only, as in consciousness, intellectually but also actively, in reality, and therefore he contemplates himself in a world he has created. (CW 3: 275-7)

But human beings are not only creative, but also communal. "The individual is the social being. His manifestations of life - even if they may not appear in the direct form of communal manifestations of life carried out in association with others - are therefore an expression and confirmation of social life." (CW 3:299)

(Footnote continued from previous page)

opposite, be it "ethical", "normative" or "evaluative".

Marx saw clearly that the present conditions of production (capitalist relations) impinge upon the full realization of these human characteristics. The abolition of these conditions would thus give rise to the realization of all human powers.

This "expressivist" notion of labour¹⁷ is present in all stages of Marx's theoretical development.¹⁸ Just as German Idealism saw the formation of spirit as self-consciousness, Marx as a materialist "praxis-philosopher" sees the formation of human species as self-creation: externalisation, objectification and appropriation are the three aspects of this circle.¹⁹ In this context we have the human labour on one side and the objectified, dead labour on the other. The latter is the crystallized result of man's interchange with nature. How does Marx define the relation between the two? Does a place for normative content exist in

17. See Ch. Taylor (1975), also Lukes (1973: 71) who, however, does not use the term "expressivist"

18. Thus Marx's normative level has been discussed under the label of "humanism". For the normative dimension of the younger Marx there already exists a vast literature, cf. von Magnis (1975). That a normative dimension is present as well in the work of the late Marx could even be accepted by the "anti-humanist" interpretation; but it can not accept the claim that this normative dimension is basic to Marx's criticism.

19. Habermas (1985:80)

this model? In the remainder of this paper it will be shown, that this question is a crucial one for Marx's analysis.

The division of Labour

This is an important concept in Marx's work which has been little discussed. It has so many facets that one always has to keep in mind carefully which one is employed when he refers to the concept.

For analytical purposes we might generally distinguish between the following six forms of division of labour: 1. spatial (geographical, intra- and international) 2. sexual, 3. social-functional, 4. occupational, 5. technical, and 6. economic. Marx's terminology, however, is completely different. Usually he discusses the concept always within following dichotomies: town/country, industry/agriculture, mental/manual, society/factory. Some commentators have claimed that it was Marx's aim to abolish the division of labour, a claim which is - at least not in that general manner - supported by the texts.

To understand what follows it should be remarked that I take Marx's concept of division of labour to have four global dimensions which underlie all his analysis of historical forms of the division of labour. These four dimensions are

derived on the one hand by his distinction of division of labour within society/within factory and on the other hand by his use of the concept in an evaluative and explanatory way.

Note, first, his claim in the early writings that the abolition of private property would be synonymous with the abolition of the division of labour. The core of this position was the identification of private property relations with the division of labour.²⁰ It was given up in the later works. (In this sense Marx indeed aimed at an abolition of the division of labour).

A less obvious case is the abolition of occupational division of labour and division of labour within society. In the German Ideology Marx confronts a society of occupational division of labour with a communist society,

where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman,

20. Cf. Paris Manuscripts, CW 3:272,317,321

shepard or critic.²¹ (CW 5:47)

And, more explicitly,

In a communist society there are no painters
but at most people who engage in painting
among other activities." (CW 5: 394)

According to this outline, occupational division of labour would be abolished. But note that Marx assumes "different branches" to exist in a communist society, retaining a functional division of labour on a societal level. Marx's main preoccupation was the merging of functional, occupational or technical roles and tasks with one class, so that fragmentation of individuals would be linked up with a class separation. Thus I interpret Marx's position in the German Ideology as allowing for functional division of labour in society (indicated by "different branches", see above), if individuals are free to change from one function to another.²²

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21. Cf. the lucid comment of Selucky: "Any farmer can afford to organise his life according to the suggested pattern even in present-day society." (1979:10)
22. To be sure, this interpretation runs against the common view which sees the German Ideology as an example for a position which wanted to abolish the division of labour tout court. Admittedly, my interpretation is based only on the hint of "different branches". But viewing this passage in the German Ideology from the more developed standpoint of his later writings, we may regard the German Ideology (Footnote continues on next page)

Capital recognizes the importance of (4=occupational), (5=technical) and (6=economic). ²³ The division of labour inside the factory can also be expressed with the term "division of tasks" which is equivalent to (5) in the above typology. In Capital Marx speaks of the "abolition of the old division of labour" (Capital 1:488) which may suggest that Marx wanted to maintain a certain division of labour. As we shall see, much depends on the interpretation of this phrase, for Marx's use of the term 'division of labour' varies in different contexts and different periods of his work. As I said, Marx's main interest was to reduce the fragmentary effects of the division of labour and, as a prerequisite therefore, the exploration of the possibility. Marx opposed strongly a life-long subordination of individuals to specialised tasks in all of his works; in other words, he opposed a fusion of (4) and (5). The division of labour within society is, however, a broader concept than the division of tasks: the occupational division of labour is only one part of the social division of labour.

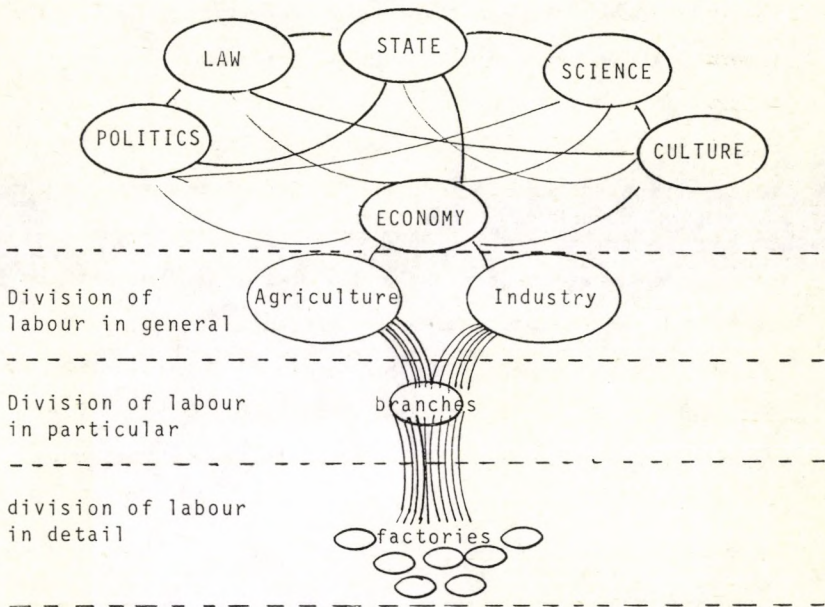
(Footnote continued from previous page)

as a "germ", leading to the more elaborate stance in Capital, rather than an opposing view.

23. Marx does not regard geographical and sexual division of labour as candidates for change.

The following figure may help to clarify the different levels and meanings of the concept division of labour:

Fig.1: Division of labour in society



In Capital Marx speaks of the division of labour in general, in particular, and in detail. (C 1:351) We can identify the different types of division of labour in Figure 1 (Since Marx here examines the division of labour in the sphere of production, he pays no attention to the upper part of the figure).

From the context in which the statement in Capital occurs ("abolition of the old division of labour"), it is clear that it is meant to refer to the division of labour inside the factory. Marx wanted to abolish the "detail-worker of today, crippled by life-long repetition of one and the same task..." (Capital 1:458), In other words, he advocated a separation between functions and professions, between the technical and the occupational dimension.²⁴

The distinction between division of labour within society and division of labour within the factory is stressed by Marx:

While division of labour in society at large... is common to economic formations of society the most diverse, division of labour in the workshop, as practised by manufacture, is a special creation of the capitalist mode of production alone. Capital 1:359)

24. Note, that a division at this point would lead to a decrease in the social division of labour

This supports my interpretation that Marx wanted to abolish the division of labour within the factory but maintain it for society as a whole. As Fetscher put it, Marx in his mature works "no longer pretends that the division of labour will altogether disappear. Certainly there will be different social functions and people to fill them...

(Fetscher 1973:461)²⁵

I now turn to the evaluative dimension of Marx's discourse. In his early writings the concept of division of labour is almost completely normative, i.e. the division of labour is a bad thing which must be abolished. Ricoeur convincingly argued that in the German Ideology the concept of 'division of labour' has the same function as 'alienation' in the Paris Manuscripts. (1986:84)

The Poverty of Philosophy may be regarded as a turning point where Marx partly continues his evaluative approach, approvingly citing Adam Smith that different abilities of

25. See also Moore (1980:41) for the same view. This interpretation is further supported by the following statement: "...fully developed individual... to whom the different social functions he performs, are but so many modes of giving free scope to his own and acquired powers." (Capital 1:488, my emph.); cf. also Critique of the Gotha Programme: "[W]hat social functions will remain in existence [in communist society] that are analogous to present state functions? This question can only be answered scientifically.." (SW 3:26)

persons were not so much the cause but the effect of the division of labour: "A porter differs less from a philosopher than a mastiff from a greyhound. It is the division of labour which has set a gulf between them." (CW 6:180)²⁶

But on the other hand Marx in this text approaches economic concepts (in opposition to Proudhon) in a historical and explanatory way. Thus he stresses the fact that general concepts like division of labour may cover many different things which do not have much in common and thus can hardly be understood by the term "divide" (cf. CW 6:180)

It is interesting to see to what degree The Poverty of Philosophy anticipates the discussion of Capital. With respect to the fragmentation of man and the tendency towards its abolition Marx takes the same position in both works. In the Poverty Marx states:

"With the introduction of machinery the division of labour inside society has

26. But Marx is not consistent here. A few pages later he speaks of the "separation of the different parts of labour, leaving to each one the opportunity of devoting himself to the speciality best suited to him..." (CW 6:183, my emph.) This is also the position adopted in the later works; it appears under the label of 'natural' division of labour which Marx takes to be present in every social formation, i.e. division of labour based on sex, age, personal endowments, geographical factors etc. (cf. Capital 1:351)

increased, the task of the worker inside the workshop has been simplified... the human being has been further fragmented." (CW 6:188, amended transl.)

In Capital we read:

[T]he detail-worker of today, crippled by life-long repetition of one and the same trivial operation, and thus reduced to a mere fragment of a man... [will be replaced] by the fully developed individual..." (C 1: 458, L&W)

In the Poverty we read that a trend toward universality arises, "the tendency towards an integral development of the individual begins to be felt." (CW 6:190) In Capital Marx gives the reason for this development:

Modern industry through its catastrophes imposes the necessity of recognizing, as a fundamental law of production, variation of work, consequently the fitness of the labourer for varied work, consequently the greatest possible development of his varied aptitudes. (C 1, L&W:458)

The meaning of this passage is not only that because 'fitness for varied work' is functional for capitalism it is realised. It is also a statement about every modern industrial society, not only in its capitalist form. As Fetscher observed, "the very nature of modern industrial production and the rapid change of its technology will demand more many-sided individuals..." (Fetscher 1973:461)

This overview has shown how closely the evaluative and explanatory level are intertwined in Marx's discussion of

division of labour and Modern Industry. When Marx ridicules Proudhon who tried to distinguish the "good sides" and "bad sides" of an economic category, one should not forget that Marx's own approach was not completely alien to this. He does not, however, as Proudhon, favour a return to the medieval masterpiece where every worker would produce all parts of a certain product (CW 6:190); rather he favours a solution beyond the factory, a solution on the basis of automation which allows for a post-medieval universality. But, nevertheless, the common interest of both lies in the abolition of fragmentation of man. Marx's abolition is a "Aufhebung", in the famous triple sense of the word (abolition, preservation, lifting up).

Still another evaluative outline we find in the Grundrisse. Here Marx stresses the beneficial consequences of the division of labour for the prospects of mankind. This judgement is based on the the important contribution of division of labour for the development of the productive forces. In one passage Marx attributes to the division of labour the role of the 'driving force' of historical dynamics which in the end will lead to the supersession of capitalism. (cf. Grundrisse:159) The negative evaluation of this process is shifted to what we might call 'powerlessness' of the individuals. It refers to the fact that individuals have to subordinate themselves under

relations which exist independently of them. (cf.

Grundrisse:157) and which are alien to them. (cf. id.)²⁷

Individuals are subsumed under social production; social production exists outside them as their fate; but social production is not subsumed under individuals, manageable by them as their common wealth." (Grundrisse:158)

We may conclude from this that Marx would allow for a certain social division of labour, as far as it is the product of the associated individuals.²⁸

If we follow Ricoeur in his interpretation that the term "division of labour" partly plays the role of the term "alienation" (Ricoeur 1986:84), this may offer us the possibility of distinguishing between the different ways in which Marx uses the concept. We then can conclude that whenever Marx spoke of the abolition of the division of labour he meant the abolition of alienation (or, more precisely: the abolition of the alienating effects of the division of labour). Whenever he speaks 'neutrally' or even positively of the division of labour he takes it to be (1) a

27. As we shall see below, this is the essence of Marx's critique of capitalism, a critique which informs his view of a communist society.

28. Selucky in his (otherwise illuminating) treatment of the division of labour is thus mistaken when he says: "Be that as it may, Marx and Engels wanted to abolish the division of labour." (Selucky 1979:10)

necessary stage in the development of mankind and its productive powers²⁹, or even,

(2) a necessary condition for every economic formation, for each society.³⁰

I take the following passage from the Kritik des Gothaer Programms as covering both the social division of labour and the division of tasks (= inside the factory):

In a higher stage of communist society, after the enslaving subordination of the individual to the division of labour, and therewith also the antithesis between mental and physical labour has vanished..." (SW 3:19)

If we read this passage as referring to the division of tasks, there arise no problems of interpretation. It is then the same statement as in Capital and refers to point (4=occupational) of my typology.

If we read this passage as referring to the social division of labour, we have two possible interpretations: (a) Marx wanted the abolition of the division of labour (because of its enslaving effects) (b) Marx wanted the abolition of the

29. Insofar as it leads to an increasing productivity

30. Capital 1:359

enslaving effects of the division of labour but the maintenance of the division of labour in general.

(a) would make sense for (1) - (3) in the typology: international, sexual and social division of labour are possible candidates to bring about 'enslaving effects'.

(b) would mean to establish a social division of labour which has no 'enslaving effects'.

Reading the passage in the line of the above passage from the Grundrisse we might derive additionally

(b'): Not all division of labour creates an enslaving subordination;

and

(b''): mental and manual do not form an antithesis if they are not crystallised into fixed occupations.

If we summarize the main difference between the early and late Marx in this respect we can say that the later Marx³¹ (partly) comes to acknowledge the necessity of a social division of labour which is realised according to functional requirements rather than according to class positions. In

31. Leaving aside the possible reading that already the German Ideology accorded to this view, see footnote 22.

one word: Marx opposed a division of labour where certain (negative) features of labour are merged with one class, whereas certain other (positive) features are merged with another class; but Marx was in favour of a division of labour where necessary functions of society were separated. I made the reservation "partly", because he was not very clear about the maintenance of specific social differentiations (politics, law, state etc.)

Marx in fact did envisage a new kind of division of labour which at least for the technical and economic sphere was brought about by capitalism itself, by its revolutionizing tendency regarding its own technical base - and hence the creation of new professions, new branches of production and the abolition of life-long professions.

In this historical perspective Marx expects the modern industry of capitalism to fulfill the important task of demystifying the production process and to set up the preconditions for an all-around development of the individuals:

Modern Industry rent the veil that concealed from men their own social process of production and that turned the various, spontaneously divided branches of production into so many riddles, not only to outsiders, but even to the initiated. The principle which is pursued, of resolving each process into its constituent movements, without any regard to their possible execution by the hand of man, created the new modern science of technology. The varied, apparently unconnected, and petrified forms of the industrial process now resolved

themselves into so many conscious and systematic applications of natural science to the attainment of given useful effects. (Capital 1:486)³²

In this outline Marx attributes the negative features to the capitalist form, the positive ones to the revolutionary technological basis of capitalism which finally develops also human individuals:

Modern industry through its catastrophes imposes the necessity of recognizing, as a fundamental law of production, variation of work, consequently the fitness of the labourer for varied work, consequently the greatest possible development of his varied aptitudes. It becomes a question of life and death for society to adapt the mode of production to the normal functioning of this law. Modern Industry, indeed, compels society, under penalty of death, to replace the detail-worker of today, crippled by life-long repetition of one and the same trivial operation, and thus reduced to a mere fragment of a man, by the fully developed individual, fit for a variety of labours, ready to face any change of production, and to whom the different social functions he performs, are but so many modes of giving free scope to his own natural and acquired powers." (Capital I: 488, my emphasis)

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32. There exists a passage in the Grundrisse where Marx takes this view to extremes:
"No longer does the worker insert a modified natural thing [Naturgegenstand] as middle link between the object [Objekt] and himself; rather, he inserts the process of nature, transformed into an industrial process, as a process between himself and inorganic nature, mastering it. He steps to the side of the production process instead of being its chief actor."
(GR:705)

Marx opposes the result of the capitalist mode of production which reduces the worker to a mere fragment of man. Instead his ideal is the fully developed individual which gives "free scope to his own natural and acquired powers". As we have seen, this account of Marx's analysis does not fit into the straitjacket of an anti-humanist reading. Yet, further, it affirms the interpretation that in Marx's circular model of objectified and living labour a place for a normative content does exist and is essential for his analysis. Still another conclusion is to be drawn. As my discussion has shown, the notion "division of labour" is a rather complex subject in Marx; it covers many things which lead to confusion, if one does not distinguish very clearly between the different meanings. Marx himself made the same point against Proudhon: the term "division of labour" covers many different things which do not have much in common and thus can hardly be understood by the term "divide".³³

From Alienation to Fetishism

Imagine now that the circle of objectification and appropriation is interrupted by an ecological crisis caused by human action upon nature. Marx is quite aware of this

33. See CW 6:180

problem. In the last section of chapter 15 of the first volume of Capital he takes into consideration the possibility of an interruption of man's Stoffwechsel with nature.

All progress in capitalistic agriculture is a progress in the art, not only robbing the labourer, but of robbing the soil; all progress in increasing the fertility of the soil for a given time, is a progress towards ruining the lasting sources of that fertility. The more a country starts its development on the foundation of modern industry, like the United States, for example, the more rapid is the process of destruction. Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth - the soil and the labourer." (Capital 1:506-7, my emph.)³⁴

And in Capital 3 he gives the following account of such an interruption:

Large-scale industry and large-scale mechanised agriculture work together. If originally distinguished by the fact that the former lays waste and destroys principally labour power, hence the natural force of human beings, whereas the latter more directly exhausts the natural validity of the soil, they join hands in the further course of development in that the industrial system in the country-side also enervates the labourers, and industry and commerce on their part supply agriculture with the means of exhausting the soil." (C 3:813)

34. In an interesting comment to this passage, Fetscher suggests that Marx was deeply influenced by the biologist and agronom Fraas in recognizing the destructive effects of most economic formations. (Fetscher 1985:124-5)

In contemporary language such a state of affairs would be described as ecological crisis.³⁵ Is this ecological crisis a result of capitalism or of technology? To this crucial question I want immediately add a related question:³⁶ is alienation due to the economic structure of capitalism or is it the necessary result of the ever expanding and changing technological feature of production? These questions point to the heart of the problematique. The marxist tradition, not hesitating, has pointed to the capitalist relations of production. No doubt, the quintessence of Marx's answer is very much the same³⁷; and yet there is something which does not match with that answer. In explaining this, I want to offer an interpretation which assumes that the term "alienation" in the early Marx later was substituted with the term "fetishism". In both cases we encounter a social feature which Marx considers to be detrimental to the 'good life', i.e. that the result of human action comes to exist as an 'external fate' (äußeres Verhängnis) against the individuals. (Cf. Grundrisse:158) In both cases we encounter the lack of control of the individuals over the

35. Note, however, that Marx's conceptual framework seems to allow only for the following two main features of ecological crisis: exhaustion of labour power and exhaustion of the soil.

36. I shall make clear below how the two are linked together

37. Cf. above, Capital 1:506-7

relations in which they are placed. The notion of fetishism, furthermore, points to the fact that certain social relations acquire an apparent power, thus giving rise to the illusion that they are things. This prevents the individuals from seeing that their social relations are producing this 'fate', or 'alien power' which dominates them.

Marx's conclusion in both cases was to change the social relations in such a way that transparency can be achieved. How does Marx, then, make use of the concepts of alienation and fetishism in his later writings?

The answer is that he employs a binary scheme in analysing the reproduction of capital: use-value and exchange-value, concrete and abstract labour and that he employs the concept of alienation in analogy to Feuerbach's model of religious alienation³⁸. Bearing this in mind, we can analyse both the value aspect (capital) and the use-value aspect (technology

38. Cf. Marx: "As, in religion, man is governed by the products of his brain, so in capitalist production, he is governed by the products of his own hand." (Capital 1:621)

As Elster put it:

"Perhaps the most central single theme in Marx's thinking, from the Economic-Philosophic Manuscripts to Capital, is the idea that under capitalism the products of men gain an independent existence and come into opposition to their makers. Religion, the state and capital are the three main examples of this process." (Elster 1985:100)

in our case) with the concept of alienation. Feuerbach hold that man projects all his good and divine characteristics onto God and remains thus the poor, mean man³⁹. What one side loses, the other gains. This "zero-sum-model"⁴⁰ is repeated by Marx analysing (1) the relation of the worker to capital, but also analysing (2) the relation of the worker to technology and (3) the relation of technology to capital. We thus have the figure of the externalisation of human powers and abilities which get embodied in technology, which in its turn gets absorbed by capital. In (1) we have a transfer of value,⁴¹ in (2) we have a transfer of skill, and in (3) we have an inversion of reality. The circle is closed: capital can present itself as the creative mechanism, which automatically produces itself, technology, and the labour power. This is the mechanism which creates 'capital fetish'. Let me provide the textual evidence for this.

(1) Transfer of value

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39. See Feuerbach, Das Wesen des Christentums, cited in Tucker (1962:89) "The more empty life is, the fuller, the more concrete is God. The impoverishing of the real world and the enriching of God is one act."
40. A most obvious case of the zero-sum model is the division of the working day into social necessary and surplus labour
41. Which is at the same time a transfer of power: the labourer produces the means for his own exploitation and domination

The labourer therefore produces material, objective wealth, but in the form of capital, of an alien power that dominates and exploits him. (Capital 1:571)

In the Grundrisse he speaks of "objectified labour as power over living labour" (cf. Grundrisse: 542, 454 and passim)

(2) Transfer of skill

[T]he skill resides not in the worker but in the machine... The social spirit of labour obtains an objective existence separate from individual workers. (Grundrisse: 529 Fn)
[I]t is the machinery which possesses skill and strength, is itself the virtuoso, with a soul of its own in the mechanical laws acting through it... The workers' activity, reduced to a mere abstraction of activity, is determined and regulated on all sides by the movement of machinery and not the opposite. (Grundrisse:693)
Along with the tool, the skill of the workman in handling it passes over to the machine. (Capital 1:420)

(3) Inversion of reality

The collective power of labour, its character as social labour, is therefore the collective power of capital. Likewise science... All social powers of production are productive powers of capital, and it appears as itself their subject. (Grundrisse:585)
The productive forces of social labour take the appearance of inherent⁴² properties of capital... (Capital 1:607)

42. Cf also: "Die gesellschaftlichen Produktivkräfte der Arbeit... Technologie... diese Entwicklung der Produktivkraft der vergesellschafteten Arbeit..., dies alles stellt sich dar als Produktivkraft des Kapitals... Die Mystifikation... wird jetzt viel weiter entwickelt..." (Resultate des unmittelbaren Produktionsprozesses:50).

The whole process is summarized as follows:

Thus, the specific mode of working here appears directly as becoming transferred from the worker to capital in the form of the machine, and his own labour capacity devalued thereby... What was the living worker's activity becomes the activity of the machine. Thus the appropriation of labour by capital confronts the worker in a coarsely sensuous form: capital absorbs labour into itself - 'als hätt' es Lieb' im Leibe' (Grundrisse:704)

Consider (2) in isolation from (1) and (3). If we allow for the possibility that this objectification always leads to alienation (and not only the capitalist use of it) we would have to accept alienation as part of the human condition.

If we return to the concept of fetishism in Marx, it may be said that it denotes generally disguised and concealed relations and the supersession of fetishism is tantamount to the establishment of transparent social relations. The concept itself derives from Portugese "feitico [lat. factitius] and means "artificial", "false" and "magic". It was first employed in ethnology, but also in philosophy (Schelling, Hegel, Kant), sociology (Comte), physics and psychoanalysis. It denotes the phenomenon that objects produced by people are invested with apparent power.⁴³

43. Cf. Hegel: "Der Verstand kommt zum Bewußtsein, daß ein Zusammenhang besteht, aber die nähere Bestimmung ist ihm unbekannt." Vorlesungen über die Philosophie der Religion, G. Lasson (ed.) 1927:91

Objects do not have that power inherently, but the attribution of power to them by their producers, creates on its own, apparent power.⁴⁴ The fetish character of commodities arises, because their social character is established only after the production, after the use-values have entered exchange and proven their exchange-value. If labour is connected from the outset as social labour there can be no fetishism.⁴⁵ Marx refers above all to commodity, money and capital fetishism; the first two he explains at the beginning of volume I of Capital, he returns to the third at several places throughout Capital, culminating in the "Trinitarian formula" (Volume III). What happens if we apply the category of fetishism to technology?⁴⁶

Technological fetishism?

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44. It would be interesting to discuss recent approaches in in epistemology ('constructivism') in respect to this problem
45. As we will see in the next section this point is crucial to Marx's perspective. If there is no social integration of labour from the outset, we get fetishism. Fetishism is a condition unworthy of human beings, to whom Marx wants to give back their power; power to control all natural and social relations. Thus he could never allow the market principle to become the dominating principle of social production.
46. I tried to disclose some hints of such an approach under (2) above. However, Marx cannot allow for an extension of this category to technology. See below for the reasons

If we recall the distinctions from above (1. relation worker/capital, 2. relation worker/technology, 3. relation technology/capital), Marx assumes the suppression of (2) by (3). Thus he dedicates little attention to (2). But this is exactly the place where technological fetishism would arise:

The objectified, past labour thus becomes the dominator of the living, present labour. The relation between subject and object gets inverted.⁴⁷ (MEGA II.3.1.:100, my translation)

Marx himself treats the machine as a fetish in situations such as the following: "During the labour process the products of former labour processes are brought back from the dead..." (MEGA II.3.1.:56, my transl.)⁴⁸ Time and again he uses the phrase of "dead" labour, "spectre", "monster with a soul of its own", "demoniac power", culminating in this curious phrase:

Here we have, in the place of the isolated machine, a mechanical monster whose body fills whole factories, and whose demon power, at first veiled under the slow and measured motions of his giant limbs, at length breaks out into the fast and furious whirl of his countless working organs. (Capital 1:381-2)

47. "Die vergegenständlichte vergangne Arbeit wird so zum Herrscher über die lebendige, gegenwärtige Arbeit. Das Verhältnis von Subjekt und Objekt wird verkehrt." (MEGA II.3.1.:100)

48. "Im Arbeitsprozeß werden die Produkte des früheren Arbeitsprozesses...von den Todten auferweckt..." (MEGA II.3.1.:56)

This interregnum ("Zwischenreich") between dead and alive astonished Marx, like it may astonish us. But Marx also gives another account of the machine.⁴⁹ This time the evil springs from the capitalist use of machinery:

It took both time and experience before the workpeople learnt to distinguish between machinery and its employment by capital, and to direct their attacks not against the material instruments of production, but against the mode in which they are used. (Capital 1: 429)

It is now clear that the two questions from the beginning of the last section are linked together. Marx's answer to them seems to be a different one, depending on which machine definition is used. The crucial question is if the "demon's dance" is due to technology as such or if it is due to its capitalist use.

Marx made an implicit distinction between commodities, money and capital on the one hand and technology on the other; the former being variable (subsumed to social determination and therefore change), the latter being constant: mankind's progress expresses itself in technological progress.⁵⁰ Hence

49. MacKenzie (1984:499) rightly notes that Marx equivocated on the crucial question of characterising the machine.

50. Later on the 'Frankfurt School' questioned this distinction. Horkheimer and Adorno revised the second assumption, arguing that modern science and technology do not provide any longer 'per se' the basis for a liberated society. Furthermore they (Footnote continues on next page)

it becomes clear that Marx could not allow for the concept of 'technological fetishism' for the simple reason that his historical outlook would have become completely pessimistic. He takes the alternative view, saying that capitalist relations are responsible for detrimental effects stemming from technology. Furthermore, he postulates the real possibility of controlling technology completely. In the Grundrisse Marx assumes that technology will always play the intermediating part between man and nature to an ever greater extent and that mankind will reach a nearly complete

(Footnote continued from previous page)

speculated about another kind of science and reason (Horkheimer/Adorno 1944); see also Benjamin (1942), Bloch (1955) and Marcuse (1967) who speculated about another relation between man and nature, even another concept of nature itself. They all in one form or another speculated about a 'resurrection of nature'. Habermas, on the contrary, rightly pointed out that their approach in turn was rather romantic than marxist (Habermas 1973:45) and argued for a revision of the first assumption saying that "jede moderne Gesellschaft, gleichviel wie ihre Klassenstruktur beschaffen ist, einen hohen Grad an struktureller Differenzierung aufweisen muß." He then charges Marx for not having recognised the "evolutionäre Eigenwert, den mediengesteuerte Subsysteme besitzen." (Habermas 1981, vol.2:499,501) Marx was so preoccupied with the 'enslaving effects' of the division of labour that he tended to neglect the importance of structural differentiation of society. Habermas shares this concern; but he tries to preserve the evolutionary achievements on the level of social systems. He tries to prevent the spill-over of 'systemic imperatives' (enslaving effects!) from the systemic level to the life world.

mastery over nature ⁵¹(which implies mastery over technology and society as well). Since an ever smaller amount of living labour will be acquired in this automated and self-controlled society, man can step outside the production process and develop his artistic, scientific powers.

This means that the results of the Stoffwechsel with nature will be (a) intended, and (b) that there will be no unintended consequences. If (a) or (b) does not occur the consequence will be side-effects, repercussions from nature to society, ecological crises and the like. My thesis is that Marx, at least in the Grundrisse, presupposed (a) and (b) for communist society and that only under these conditions full mastery over nature would be possible.⁵²

But this optimistic view rests on the basic assumption that technology can be controlled completely by the individuals. Is this a valid assumption? I think it is not, for several reasons. First, recall Marx's definition of the machine. It

51. See Grundrisse:705. See also the following passage: "[T]he conquest of the forces of nature by the social intellect is the precondition of the productive power of the means of labour as developed into the automatic process..." (id.709)

52. Note, however, that a full-fledged control is a self-defeating concept, cf. Masuch (1987) because it would presuppose the knowledge of the future. See also Popper (1960)

is essentially an artifact which is based on the transfer of skill from the worker to a mechanism. A mechanism which expropriates the worker from his abilities constitutes, however, a situation of alienation.⁵³ Second, Marx's assumption is inspired by the 19th century faith in the possibilities of science. He shared the illusion that natural sciences could achieve an 'absolute knowledge'. But with the experience of the last hundred years we may say that the 'opacity of nature' is by no means resolved into complete transparency (and it is doubtful if it will ever be possible). Third, the combination of technologies leads to a multiplication of the difficulties to control them.

This becomes a question of life and death if we consider technologies which involve or produce dangerous substances. As Perrow pointed out, some characteristics of high-risk technologies "suggest that no matter how effective conventional safety devices are, there is a form of accident that is inevitable." (Perrow 1984:3) This alarming conclusion is derived from the specific features of a part of modern technology: "[M]ost high-risk systems have some special characteristics, beyond their toxic or explosive or genetic dangers, that make accidents in them inevitable,

53. There may be a compensation if the possibility for the acquisition of new skills exists, cf. part 2

even 'normal'. This has to do with the way failures can interact and the way the system is tied together." (Perrow 1984:4) This sort of system is characterised by 'interactive complexity' and 'tight coupling'. If both taken together will inevitably produce an accident, this would be the case for a normal or systems accident in Perrow's definition. As he makes clear, "we have such accidents because we have built an industrial society that has some parts, like industrial plants or military adventures, that have highly interactive and tightly coupled units. Unfortunately, some of these have high potential for catastrophic accidents." (Perrow 1984:8)

Let me introduce a thought experiment: imagine a technologically highly-developed and complex society without a capital-labour-relation, without "money" in the capitalistic sense, i.e. a society which produces in social cooperation, in this case we would not be able to observe what Marx called "capital fetishism", "commodity fetishism" and "money fetishism" - but we might find the phenomenon of technological fetishism. The sum total of social labour would follow criteria of efficiency, of rationality, of discipline, but would not consist of interactions and

interrelations always and necessarily transparent to the producers.⁵⁴ Hence we would still have "normal accidents".

Let me then provide a tentative definition of what technological fetishism is. I think the definition should cover at least three phenomena: First, that the present structure of technology is the unintended consequence of human action; second that technology affects the life of everyone in a significant way; and third that its logic can be understood, if ever, only by a few specialists. We may generally distinguish between technology as 'single artifact' which is used in an instrumental way and the combination of technologies within a complex structure. An example for the first case is a tool or a single machine which was projected by engineers (and who are not astonished by the outcome). An example for the second case would be the introduction of new technology - which virtually (especially if it is a revolutionary technology) affects all spheres of society: economy, law, politics, education, ... and, finally, science and technology again, thus starting a new cycle.

54. This would be possible only under conditions of face-to-face relations, i.e. under conditions of community rather than society. Mediating institutions are of evil here; cf. Marx's plea for the transcendence of the state in the Jewish Question:31 and in the German Ideology:46. Cf. also Gray (1982:76 passim), Lange (1978:30 passim) and McMurtry (1978:53)

The modern transport system may illustrate the two examples: although many people do not know how exactly their car works, they are still able to use it; specialists on the other hand (engineers, mechanics), know the 'secrets' of the car. But they become laymen as regards the aggregate outcome of the modern traffic system. This aggregate outcome is unintended; it affects everyone in a significant way and constitutes a problem for society. It becomes a field of conflict and research involving many different social spheres such as medicine (car accidents, pollution), social science (traffic jams), politics (taxes, constructing of streets etc.), law (regulation of traffic and its effects), education (basic rules of survival), mass media (information), economy (occupation) etc.

Consider now the difference to the individual car driver who does not know the technology of his car, but is nevertheless able to use it. In case of malfunctioning a mechanic adjusts the car. In the case of the traffic system we do not have one subsystem which takes care of the whole thing in case of its malfunctioning. Any one sphere's attempt to overcome a specific problem connected to the traffic system has to use 'outputs' from other spheres (which it then uses as 'input') and, more importantly, its own 'output' will in turn affect the other spheres.

Socio-technological combinations, thus conceived, would be a "black box", constructed, in the last instance by man, but not open to him. This is to say that unintended consequences (beneficial or harmful) have to be taken into account.⁵⁵ The Grundrisse's hope for getting technology (and thus: nature) under complete control must thus be regarded as an illusion. To put it another way: technology (and other forms of objectifications, i.e. social forms, institutions) and human development follow a different logic; although the first can be grasped as the result of man's objectification, it is possible that after a "take-off-period" the objectifications of human activity acquire an autonomy and gain a real existence of their own ("second nature").⁵⁶ This affects the

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55. In regard to the beneficial functioning of institutions cf. the instructive passage in Bourdieu: "Thus the social world comes to be peopled with institutions which no one designed or wanted; those who are ostensibly 'in charge' cannot say, even with the advantage of hindsight, how 'the formula was found', and are themselves astonished that such institutions can exist as they do, so well adapted to ends which their founders never explicitly formulated." (Bourdieu 1981:311-2)
56. When we apply the notion of 'fetishism' to technology, this might be analogous to what in modern sociology is known as 'institutionalisation' (Berger and Luckmann) or 'emerging properties' (Buckley, Blau). As Blau put it: "Although complex social systems have their foundation in simpler ones, they have their own dynamics with emergent properties." (Blau 1964:125) Margret Archer commented: "The latter can arise at all levels from small-scale interaction upwards, although as scope grows they are increasingly distanced from everyday psychological
- (Footnote continues on next page)

very relation between man and his objectivations: it can no longer be a direct one, as in ancient societies, but mediated through and governed by imperatives which stem from the "Dingwelt", which man in turn can only affect with mediations (money, power, technology etc.) In this case conditions (a) and (b) will not be realistic ones.

As we have seen, the very notion of complete 'mastery over nature' is an unrealistic one. It would presuppose 'complete mastery over technology and society' (i.e. all social relations must be brought under control of the 'associated individuals' in order to achieve transparency and to avoid unintended consequences.)⁵⁷

(Footnote continued from previous page)

dispositions but never ultimately detached from interaction. The highest orders of emergence are nothing more than the relations between the results of the results of interaction." (Archer 1985:80) Recall here Marx's definition of fetishism that social relations appear as relations between things. Modern sociological theory is aware of this mechanism, maintaining, however, that this appearance is no false illusion but expresses the real relations. And, what is more, the 'results of the results' cannot be designed and controlled by man in a direct way.

57. It is in this sense that Habermas spoke of the idle hope of Marx to bring back these objectivations into the horizon of the life-world. (Habermas 1985:83)

Let us return again to the double question from the beginning of the last section. We have seen that Marx's assumptions about 'complete mastery over nature' are not convincing ones. The impact of technology will thus be decisive for communist society. Admittedly, I did not account for capitalist relations as causes for ecological crises; but as should have become clear by now, it is sufficient for my purpose to show that the orthodox marxist account falls short in explaining decisive features of present society, i.e. technological complexity and ecological problems arising out of it. If my account is valid, the consequences for Marx's theory of liberation are severe. Since technology is part of the human condition it cannot be superseded. It thus cannot be included into the alienating causes, otherwise Marx's distinction between "objectification" and "alienation" (first employed against Hegel and then against the economists of his time) would collapse. However, Marx's historical hope is grounded on this very distinction, his bold project of putting into practice a state of affairs which would enable mankind to objectify itself in a non alienated way. His world-view would have become completely pessimistic. It would not allow the perspective of overcoming a state of affairs in which the individual is suffering, in which it is alienated, in which it is acting with false consciousness.

PART TWO: COMMUNISM

Let us see what traits of communist society Marx has given. Since he often refused to do this job, there are not many passages we can base our judgement on. In his Comments on James Mill (1844) he connects a "human society" to the release of human nature:

A
Let us suppose that we had carried out production as human beings. Each of us would have in two ways affirmed himself and the other person. ...I would have directly confirmed and realized my true nature, my human nature, my communal nature. Our products would be so many mirrors in which we saw reflected our essential nature. (CW 3: 227-8)

Marx opposes production under capitalist relations with 'production as human beings'. Human beings are characterised as creative and communal beings. A society which enabled the release of all human powers would be 'the human society'.⁵⁸

In the German Ideology he qualifies the fettering instances

58. In the Paris Manuscripts Marx does not yet equate this human society with communism: "Communism is the necessary form and the dynamic principle of the immediate future, but communism as such is not the goal of human development, the form of human society." (CW 3:306) In his later writings he does not return to this possible difference; there he equates the release of all human powers with communism.

(the "causes of misery"⁵⁹), which prevent human nature from actualising itself, putting stress on the conscious subjugation of natural forces, transforming them into products of mankind:

B Communism differs from all previous movements in that it overturns the basis of all earlier relations of production and intercourse, and for the first time consciously treats all naturally ("naturwüchsig") evolved premises as the creations of hitherto existing men, strips them of their natural character and subjugates them to the power of the united individuals. (CW 5: 81, my emph.)

Note that Marx's analysis becomes more concrete here. He distinguishes between 'natural' (in the sense of 'given', 'unchangeable', 'opaque') relations and relations which are the product of conscious human action.

In Capital the same idea reappears. Marx analyses even closer the conditions for the emergence of 'natural premises' and the possibility to treat them as the creations of 'hitherto existing men'. In so doing, he employs the Stoffwechsel concept to analyse the relation of society to nature and conceives of human development in the circle of externalization, objectification and appropriation.

59. In Capital 1 Marx approvingly cites the monk Ortes from Venice, who said: "Instead of projecting useless systems for peoples' happiness, I shall limit myself to investigate in the causes of human misery." (Das Kapital 1: 675-6, my transl.)

Appropriation would not only mean "aquisition", but the opposite of "alienation".⁶⁰ To bring this about, private property needs to be abolished and labour has to be constituted as social labour from the outset.

C

Let us now picture ourselves, by way of change, a community of free individuals, carrying on their work with the means of production in common, in which the labour-power of all the different individuals is consciously applied as the combined labour-power of the community. (Capital 1:78) The life-process of society which is based on the process of material production, does not strip off its mystical veil until it is treated as production by freely associated men, and is consciously regulated by them in accordance with a settled plan. (Capital 1:80, my emph.)

In the last two passages Marx envisages communism essentially as a stage of society in which the united individuals (freely associated men) act upon their material production and conceive their products as products of their own; not as products of nature, not as mystical products ("natural character" and "mystical veil" are interchangeable in the two sequences - they fulfill the same function in his argument). In Capital he maintains that production must be "regulated in accordance with a settled plan", this can be interpreted here as a more concrete formulation of the German Ideology's "subjugation of human creations to the

60. See Selucky (1979:50-1) for such a translation of the German "Aneignung".

power of the united individuals." Communism will be the historical stage under which men for the first time supercede the natural character of the Stoffwechsel. Note that in each case (from A to C) social relations are considered to be completely transparent which is the precondition for the vanishing of fetishism (see part 1).

In Capital 3 Marx summarises several strands of his analysis into the following passage:

D

In fact, the realm of freedom begins only where labour which is determined by necessity and mundane considerations cease; thus in the very nature of things it lies beyond the sphere of actual material production. Just as the savage must wrestle with nature to satisfy his wants, to maintain and reproduce life, so must civilized man, and he must do so in all social formations and under all possible modes of production. With his development this realm of physical necessity expands as a result of his wants; but, at the same time, the forces of production which satisfy these wants also increase. Freedom in this field can only consist in socialised man, the associate producers, rationally regulating their interchange with nature, bringing it under their common control, instead of being ruled by it as a blind power; and achieving this with the least expenditure of energy and under conditions most favourable to, and worthy of, their human nature. But it nonetheless still remains a realm of necessity. Beyond it begins that development of human energy which is an end in itself, the true realm of freedom, which, however, can blossom forth only with this realm of necessity as its basis. The shortening of the working day is its basic prerequisite. Capital 3:799-800)

This remarkable passage is a synthesis of: his Stoffwechsel concept, the possibilities of liberating mankind on the basis of technological progress, and a characterisation of communist society. It is very much in the same vein as the passages A-C, with one difference to be noted. In Capital 3 he acknowledges that the Stoffwechsel man-nature will always be a necessary condition for the existence of mankind. This is the 'realm of necessity' in which labour cannot become 'life's prime want'. The release of human powers will become possible only in the 'realm of freedom' where the 'development of human energy' becomes an end in itself. Let us recall here the passage from the Grundrisse where Marx envisaged a 'complete mastery over nature', a society in which man can step aside the production process. In comparison to the Grundrisse his conclusion in Capital 3 is more modest, putting the stress on the conscious regulation of man's relation to nature and to his fellowmen. This weaker notion of the domination of nature seems to be more defensible, which does not mean that it is completely unproblematic, as we shall see in the next section.

Market and Plan

In this section I want to examine several authors who have tried to interpret the decisive features of communist

society according to Marx's theory. With one exception they are all sceptical regarding the feasibility of Marx's outline. Main objections are that communism is economically inefficient, that it may lead to political unfreedom, that some of its actualisations would be unrealistic and even undesirable.

According to Selucky, Marx sees three main factors opposing the establishment of communism: (a) scarcity; (b) division of labour; (c) private property. Since (a) and (b) cannot be overcome, Marx's conclusion was, says Selucky, to abolish (c). Even if Selucky's account is not adequate⁶¹, for the sake of the argument I shall discuss his criticism.

According to Selucky, then, Marx identified (wrongly) private property with one other characteristic which is not necessarily inherent in this concept: the claim that private property and the market are inseparably linked together.

61. Selucky's assumptions are not very convincing. As I have shown above, division of labour need not be an obstacle for the establishment of communism. The question of private property is posed to general by Selucky. It is true that Marx saw the abolishing of private property as the precondition for a classless society. By private property he means private ownership of the means of production. But Marx also clearly accepts individual property in socialist society which means property which cannot be used to exploit or dominate other individuals (Cf. Moore 1980). I deal with the problem of scarcity below.

From this it was a small step for Marx to conclude that the abolition of private property means also the abolition of the market. But why did Marx believe that the abolition of private property could eliminate the production of commodities and therewith also the market? The answer, says Selucky, has to be found in Capital 1: "Only such products can become commodities with regard to each other, as a result from different kinds of labour, each kind being carried on independently and for the account of private individuals." ⁶² Selucky comments:

"On the one hand, the independence (autonomy) of producers is here rightly recognized. On the other hand, the existence of commodities is linked to private individuals whose autonomous position stems from private property. The causal connection of an autonomy of producers with private property is both a methodological and theoretical error. It is a methodological error because it adds to one of the necessary preconditions of the market (autonomy of producers) its historically transient and therefore unnecessary form (private property). It is a theoretical error since the essence of the phenomenon (autonomy of producers) is not distinguished from the phenomenon's appearance (private property)." (Selucky 1979: 29-30)

This criticism is a forceful one if, and only if, Marx failed to distinguish between different forms of property and if he really linked private autonomy to private property - a question which I do not discuss here. But we can state without doubt that Marx's plea for direct allocation and

62. Cited in Selucky (1979:29)

distribution (labour posited as social labour from the outset - "als gesellschaftliche gesetzt",⁶³) in communism can be linked to his preference for community over society. This theoretical position, as we shall see in the next section, is open to objections, one of them formulated by Selucky. He argues that the mere abolition of the market is not a sufficient precondition for a more efficient functioning of socialist economies. "That is why the traditional Marxian concept of direct allocation and distribution as the exclusive and obligatory socialist alternative to the market cannot be accepted..." (Selucky 1979: 48)

Freedom, necessity and the orchestra

Let us consider now a more optimistic position, a suggestion offered by G. Markus. He sees the "rift" in Marx between his 'scientism' and 'romanticism' (cf. Taylor 1975) not as a

63. Cf. Grundrisse:172 where Marx contrasts capitalism and communism: " In the first case the social character of production is posited only post festum with the elevation of products to exchange values and the exchange of these exchange values. In the second case the social character of production is presupposed and participation in the world of products, in consumption, is not mediated by the exchange of mutually independent labours or products of labour." See also Cohen (1978:119-20)

weakness, but as a strength. Thus he interprets the Marxian distinction between the "realm of necessity" (N) and the "realm of freedom" (F) exactly in the perspective of this "rift": socialism would mean, according to Markus, the realization of an institutional separation between the technical conditions of the reproduction-process and the sphere of human creativity, a separation between technical and social spheres. (Markus 1980:48) The further existence of phenomena like fetishism would then come to an end and transparency could be achieved. Institutional separation would mean a division between communal self-determination of the associated producers on the one hand and the functions of a central board of economic management which tasks are exclusively technical on the other. (id.,48) Several arguments can be made which oppose this account. The first point is the assumption of Markus that the 'social' and 'technical' could be separated.⁶⁴ I would maintain, on the contrary, that the two are intertwined ever more under modern conditions: there exists no technical dimension without a social one, not even if we apply the extreme formula of the Grundrisse where Marx gives the example of a fully automated production process. With the presupposition of a fully automated production we would cancel out (N)

64. They are, according to Markus, closely connected in all forms of society up till now, but may be separated in a socialist society for the first time.

almost completely - but not the social dimension of it: social control would be as important as today. This leads me to my second criticism. In speaking of the social dimension of (N) I oppose Markus' definition of (N) and (F) as technical and social realm.⁶⁵ The distinction between (N) and (F) itself, however, is a very valuable one if we define it as a distinction between the realm of 'necessity and mundane considerations' ("Not und äußere Zweckmäßigkeit" in German) and the realm of self-realisation. With this definition we have the social dimension in both realms.⁶⁶

But what about the "communal self-determination of the associated producers" and the "functions of the central board" Markus spoke of?

According to Selucky, Marx believed that important functional differentiations of society (like economy and

65. Note that Markus makes a move from the distinction between reproduction process and human creativity to the distinction between technical and social spheres, conflating both. The first distinction is Marx's (Capital 3, cited in the previous section), the second is a 'creative' invention of Markus.

66. And here we have the possibility of giving another solution to the problem of technology and alienation. In (N) work is, as it were, essentially characterised as 'transfer of skill'. But the individuals get compensated in (F), acquiring new skills. This solution would not do away completely with alienation, but would allow for a reduction of alienation.

politics) could be reversed and fused together in a synthesis of community-life. To illustrate this, Marx made reference to the so-called orchestra-model (see Capital 3:386-7). According to Selucky "the orchestra model is the general model for the cooperation in the classless community of free associates:⁶⁷ the combined labour and all combined social activities would not require rulers but just 'conductors' who will co-ordinate individual workers involved in team jobs." (Selucky 1979:73) He charges Marx here with confusing a micro-system with a macro-system. This deficiency appears when we consider the crucial question of who is making the decisions. Selucky gives three possible models for decision-making: (a) the conductor, (b) the orchestra as a whole, (c) an outside committee. Thus the orchestra model can provide an alternative organisational model on the micro-level. But applied to the level of society, i.e. to the macro-level, it fails: "If applied to society as a whole, these questions are, unlike the technical essence of the orchestra's inner structure, of a political nature. And since the orchestra may be subject to all the three above mentioned systemic arrangements, the very orchestral model as the pattern for a non-compulsive

67. The general model for capitalist production is the army, cf. Capital 1:332

complex co-operation of men fails to offer any guaranteed protection from coercive rule." (1979: 74)⁶⁸

Selucky rightly observes that the danger of totalitarianism arises here. It arises, above all, because Marx favoured the community model over the society model. It is his preoccupation with alienation which tempts him to cancel out important achievements of modernity, for example the institutional separation of economy and politics. It is not by accident that Marx undervalued the social differentiation of society into law, politics, economy etc. The only general answer we may derive from his work is to abolish the 'enslaving effects'; but he failed to see that the orchestra model, transposed to the macro-level, could produce 'enslaving effects' as well. Selucky holds that to be realistic a political body ("hierarchy of bodies", as he calls it) must exist "as long as there is social division of

68. Selucky goes on to establish a close connection of this fact with the base-superstructure concept in Marx's theory. He concludes that one cannot accept the base-superstructure concept and simultaneously imagine a centralised, hierarchically organized economic subsystem coexisting with a pluralistic, horizontally organized self-governed political subsystem: "In a society with command central planning there is no room for autonomous policy-making in the provinces, cities and villages." (Selucky, 1979:78) It is not clear to me if Selucky would see this opposition also as a logical contradiction if the base/superstructure concept is given up, viz. why should it be impossible to have a mixture of centralised and de-centralised spheres in society?

labour and scarcity... deciding about conflicting priorities and, consequently, about conflicts of interests." (Selucky 1979:79)

Consider now a second possible criticism of Marx's communist outline. The 'conflicts of interests' is the central problem here. One possible solution to this problem is the political body with its binding decisions. But also the market is a candidate to solve this problem, as the following shows. According to Marx's concept of human nature, man should work (1) creatively and (2) communally. Dimensions (1) and (2) may come, however, into opposition to each other. David Miller has commented on this tension: "Unless we assume that the needs of producers and consumers dovetail perfectly, these two requirements are in tension with one another. In deciding what to produce, should I give precedence to my own creative impulses, or to others' needs as I perceive them?" (Miller 1987: 186).⁶⁹ Miller concludes from this, some sort of exchange system or market to be inevitable (he favours a model of 'market socialism'). "In the absence of an exchange system, there is no readily available standard of value that would enable each person to measure his productive

69. See already Niebuhr (1932): "[T]here can never be a perfect mutuality of interests between individuals who perform different functions in society." (1932:195)

contribution... Thus there is no possibility of norms emerging that would indicate the value of the work each person must perform to discharge his social obligations." (Miller 1987:196)

At this point I apply again the distinction between (N) and (F) saying that both Selucky and Miller miss a central point in the argument of Marx, namely the distinction between socially necessary and surplus labour. If we interpret the first as the realm of necessity (N), the second as the realm of freedom (F),⁷⁰ we can say the following: In (N) individuals are confronted with the eternal necessity of transforming outside nature to reproduce their lives which may even be done with a hierarchical organization [but which must not contradict (F)]. In (F) the kind of conflicts Selucky (economy and politics) and Miller (comparing the products of each other's work) envisage, simply can not exist. Here labour becomes life's prime want, self-creativity etc. without being submitted to economic rationality and hence not being subject to an exchange rationale. The character of labour is defined differently

70. However, not the full amount of surplus could be the basis for this realm, since also a communist society needs funds (surplus) to replace and eventually extend means of production, to foster new needs and develop new powers, to provide health service and education, in a word: to provide means for reproduction and the future generation.

according to both. In (F) it is essentially free activity, self-realization; in (N) it is always forced upon the producers, in all societies.⁷¹ They become "dominated by the pressure of an extraneous purpose which must be fulfilled, and the fulfilment of which is regarded as a social duty." This passage from the Theories on Surplus Value is cited by Lukes who sees this as the heart of the matter, "the key to Marx's conception of 'real' freedom" which means "emancipation from the pressure of 'extraneous purposes', from what is regarded as a natural necessity or a social duty." (Lukes 1985:89) I think that this interpretation identifies correctly the reason why Marx condemned capitalism.⁷² But it should be emphasized that Marx distinguished between alienated social duties on the one

71. See Marx's discussion of Smith's and Fourier's concept of labour in the Grundrisse where he tries to maintain a middle position between the two: labour neither as 'oath' nor as 'play'. When G.A. Cohen speculates about the possibility that some necessary labour in communism might be enjoyable, he seems to refer to the possibility mentioned by Marx, namely that labour might get changed into "travail attractif" (see Grundrisse:611; in contrast, in Capital the distinction between (N) and (F) is more strict) Cohen quite rightly thinks that necessary functions may be fulfilled in a pleasant way. He gives the example: "Some eating is enjoyable"(cf. Cohen 1978:324-5). If it is possible to do something necessary in an enjoyable way, we could introduce some elements of (F) into (N), a possibility which seems to have been largely excluded in Capital: self-realisation takes place mainly in the realm of freedom.

72. See Veca (1977) for a similar view

hand and natural necessities on the other. The first should be abolished and transformed into 'authentic purposes' (or whatever formula one likes; the transformation of labour into a commodity was surely an evil for Marx); the second cannot be overcome completely (the degree of successful domination of nature determines its degree). In this respect the famous statement from the third volume of Capital is of great importance, since here Marx exactly acknowledges the "necessity and mundane considerations" (in German: "Not und äußere Zweckmäßigkeit") also in a communist society. When Lukes asks: "And are there not natural necessities which human activity (including labour) must fulfil as a prerequisite of social cooperation in general and ... of a complex modern order in particular?" (ibid) Marx's answer was affirmative. To be sure, Marx held the view that 'natural necessities' will be reduced more and more, depending on the level of development of the productive forces. He could not see, however, that a complex modern order has produced new restrictions which stem from the autonomy of social spheres vis-a-vis the individuals. The "Sachzwang" of the working of social institutions may be equated here with social duties (alienated or not) which leave little space for radical change: they ("only") can be transformed (into non- or less alienated ones) but not abolished, if they are functionally necessary for modern society. But this "only" may be a great lot for our time.

Total individuals

I now come to a critique of Marx's concept of human nature which has been put forward by G.A. Cohen. He questions both the possibility and the desirability of Marx's "total individuals" (we are thus dealing with problems of [F]).⁷³ Starting from a comparison between Hegel and Marx he charges Marx with having abandoned a most valuable element of Hegel: human's need of self-definition, of identity. From this basic flaw follows Marx's blindness in regard to national, racial or religious conflicts which "generate, or at least sustain, ethnic and other bonds whose strength Marxists systematically undervalue, because they neglect the need for self identity underlying them." (Cohen 1983:235) This undervaluation of self-definition can also be located in Marx's ideal of work as the release of all powers inherent in man, thus escaping location within a social role. As Marx said in the German Ideology: "In a communist society there are no painters but at most people who engage in painting among other activities." (CW 5: 394) Cohen comments: "A society in which everyone is free to develop in any direction is not the same as a society in which anyone is able to develop in every direction: that kind of society

73. I shall consider only the problem of the possibility of Marx's 'total individuals', leaving aside the question of desirability.

will never be, because there will never be people with that order of ability." (Cohen 1983:237)⁷⁴ According to my distinction above, Cohen's sort of conflicts would take place mainly in (F) which is tantamount to the statement that in (F) we will have also scarcity - albeit the scarcity of the human species.⁷⁵ How can we respond to that?

First, obviously, there is not much textual evidence for the view that Marx also saw scarcity as an enduring feature of history, because communism, among other things, would bring abundance of (at least) material wealth.⁷⁶ But one could also derive a more pessimist view from Marx's own outline, because of the very character of human needs, which develop all the time, thus creating always new limits of satisfiable

74. Or, in Selucky's words: "One can hardly invent computers in the morning, perform neurosurgery in the afternoon, repair a jet in the evening and conduct a symphonic orchestra after dinner without becoming respectively computer engineer, neurosurgeon, jet-mechanic and conductor." (1979:10-1) But everyone can, according to Andy Warhol, become famous for 15 minutes in his life.

75. Cf. also Elster: "Different forms of self-realisation are unequally demanding by way of material support. Torch sculptors need more than cooks, film directors more than chess players." (1985:524)

76. Cf. Critique of the Gotha Program: "... and all the springs of co-operative wealth flow more abundantly..." (SW 3:19). Cf. also Grundrisse: 325 where Marx speaks of "...reproduction in a constantly greater abundance"

needs, hence scarcity.⁷⁷ Second, and more important, the late Marx held a more moderate view regarding the possibilities of human development. Cohen is mistaken regarding the textual basis: everything he cites refers to the division of labour in Marx's early works. However, the extreme formula from the German Ideology ("fishing and hunting") does not reappear in Capital, nor in the optimistic Grundrisse.⁷⁸ As we have seen, Marx holds social functions to be indispensable for communist society. Thus when Marx speaks of the "development of all human powers", the "absolute working out of his creative potentialities" (Grundrisse:488) he does not refute that individuals adapt to certain roles for a certain period in their life, and he does not say that each and every individual will be able to work out all of his creative potentialities, nor that he should. Marx's main concern was to explore the possibilities for an abolition of the fragmenting effects of the division

77. Cf. Capital 3: "With [civilized man's] development [the] realm of physical necessity expands as a result of his wants..." (799). For a systematic treatment of this problem see Hirsch (1976).

78. Here we read about the "free development of individualities... the general reduction of the necessary labour of society to a minimum, which then corresponds to the artistic, scientific, etc. development of the individuals in the time set free, and with the means created, for all of them." (GR:706)

of labour; he consequently advocates the free development of the individualities. But, when Lukes asks,

[W]hat does 'the free development of individualities' for all mean? That all should have an equal opportunity to develop whatever manifold capacities... they severally have? Or that all would in fact realize such capacities... Or does it mean that a maximum level of 'artistic, scientific etc. development' will be achieved in 'society' as a whole? (Lukes 1985:90)

Marx does not offer a solution to these questions. What he based his outline upon, was that capitalism already developed human powers (but crippling them at the same time), that capitalism already abolished life-long roles⁷⁹ (but petrified the role of wage-labour, the division of mental and manual work). Marx assumed that communism would continue on this road (but abolish the negative traits mentioned). As early as in the German Ideology we find the following outline:

Thus things have come now to such a pass that the individuals must appropriate the existing totality of productive forces, not only to achieve self-activity [Selbstbetätigung, R.G.Ü, but, also, merely to safeguard their very existence... The appropriation of these forces is itself nothing more than the development of the individual capacities corresponding to the material instruments of production ... Only at this stage does self-activity coincide with material life which corresponds to the development of individuals

79. See the French worker who returned from San Francisco, reporting that he had exercised a number of professions which he previously would never have dreamed of, Capital 1:487

into complete individuals [Totale Individuen, R.G.] and the casting off of all natural limitations... With the appropriation of the total productive forces by the united individuals, private property comes to an end." (CW 5: 87-8, my emphasis)

In Capital 1 Marx says that the division of labour in the factory will be changed in the sense that a division of tasks remains, but that these tasks are not forced upon individuals in life-long occupations. Therefore individuals must be trained in an allround manner (by means of polytechnic education) to secure the double effect of (a) avoiding the life-long adaption to one professional role and (b) overcoming of the split between manual and mental labour.⁸⁰ Of course, all of this applies only to (N). Here it is not necessary to answer the questions of Cohen, since Marx was content with the assertion that not each and every individual must be able to perform all tasks. Rather it is the 'general intellect' (Grundrisse) 'Gesamtarbeiter' (Capital 1:508-9) which is important here.⁸¹

80. See Capital 1:488, see also Critique of the Gotha Programme, SW 3:19

81. "Intelligence in production expands in one direction, because it vanishes in many others. What is lost by the detail labourers, is concentrated in capital that employs them." (Capital 1:361) If the 'Gesamtarbeiter' succeeds in appropriating this result again (by expropriating capital), alienation will vanish - but a division of tasks will persist. This division of
(Footnote continues on next page)

Cohen, however accepts the political powerful use which can be made out of Marx's human nature concept, supporting Elster's argument. Elster suggested that the following interpretation would make good sense of Marx's thoughts on this matter:

It is quite possible for technical progress during the later stage of capitalism to be both increasing and lower than it would have been under a socialist regime starting at the same technical level." (Elster, 1983: 217)

This being so, because in Marx's view, "innovative and creative activity is natural for man and springs from the inner sources of his being. Contrary to the usual approach in political economy, the problem is not one of creating the incentives to innovate, but of removing the obstacles to the natural innovative drive of the individual." (Elster 1983: 216) This, however, does not fit well with the account Miller has given above. Miller thinks that since individuals hitherto have been forced to develop their needs, powers and productive forces, they might not develop them under communism. Thus he derives an essentially conservative trait within communist society and concludes: "'Human nature' is not a sufficient guarantor of progress." (Miller 1987:198) It is, indeed, true that Marx did not provide an explicit

(Footnote continued from previous page)

tasks is, to repeat, not assimilated to a division of occupations.

feedback-mechanism from (F) to (N) which would be necessary to develop the productive forces. He only states that a person in communism (which, above all, has more free time to develop its powers and needs) coming from (F) enters (N) as a new, different, richer person and thus affects social production significantly.⁸² Furthermore, Marx himself shows how mankind was forced to develop productive forces.⁸³ On this account it is doubtful if we can rely on this rather speculative affirmation of 'human nature'. Furthermore, it would mean a politically impotent position for the supporters of communism.

But is this account valid at all? Let us discuss Miller's problem again with my distinction between (N) and (F). In (N) we have fully or partly automated production. The producers have to deal with necessity and mundane considerations. They are, as it were, forced to develop production. As Marx put it: "But it ... still remains a realm of necessity." (Capital 3:799) But they do this according to a settled plan, they control conditions of the

82. See Grundrisse:712

83. Cohen, very much in the same vein as Miller, juxtaposes Marx's anthropology with his theory of history: in the first people are by nature creative beings, they produce in the condition of freedom conferred by material plenty; in the second they do not produce freely but because they have to. Cohen asks if the two are in contradiction with each other or compatible - with no clear result. (cf. Cohen 1983:241-5)

process consciously. Since they are forced also in communism to transform nature, to invent and develop productive forces, I cannot see how the development of mankind tends to stagnate because human beings would not develop innovative capacities enough. Miller's argument seems to presuppose a society in which (f) has driven out (N) completely.

Conclusion: Between Enlightenment and Romanticism

From what we have analysed so far, one result springs immediately to the mind: the twofold judgement of essential features of capitalist society. They are condemned insofar they cripple human individuals, they are praised insofar they develop the possibilities for a communist future. Thus Marx's ethical foundation (i.e. his philosophical anthropology) and his historical outline are in tension with one another under present conditions.⁸⁴ They are compatible, and what is more, essentially the same in communist society. Here the latter is the fulfilment of the former, human essence being freed for the first time from all obstacles to its self-fulfilment. But under present conditions this tension has to be recognised. It has been expressed with the phrase that the progress of mankind is possible only on the

84. See Moore (1980)

backs of individuals, what 'man' gains, men lose.⁸⁵ Marx himself was fond of the following Goethe poem which he cited several times:

Sollte diese Qual uns quälen,
da sie unsre Lust vermehrt;
hat nicht Myriaden Seelen
Timurs Herrschaft aufgezehrt?⁸⁶

This finalistic conception Marx took over from Hegel⁸⁷, according to whom it is the necessary return of Spirit (Geist) to itself which re-unifies the division of the world. Marx transposes Geist to man (as 'species being, Gattungswesen) and arrives at the historical scheme that mankind first lived in primordial harmony, then became fragmented (alienated) and finally will be re-unified again. Capitalism is the historical stage which precedes the final solution. In this stage the contradictions are carried to extremes. But with the growth of the problems the potential for their solution grows as well.

As the previous discussion has shown there are some reasons to conclude otherwise than Marx did. It may be that it is not only capitalism which hinders the desired reconciliation

85. See Cohen (1978)

86. As cited, for example in MEGA II.3.1.:327

87. See Fetscher (1985:115)

but also the complex structure of modern society, technology being part of it.⁸⁸ Furthermore, we may say that a complete abolition of alienation and fragmentation cannot be expected. What can be expected is the reduction of enslaving effects to the greatest possible degree.

Loewy (1981) interprets the position of Marx as one which combines the critical impact of revolutionary romanticism with the civilizing force of enlightenment, technology and capitalism. Thus Marx often gives twofold judgements on some decisive features of capitalism. One example was the division of labour; another was that "dead labour" (i.e. capital) gains the losses of the living labour, but also has a positive side in that it "presents itself historically as a progress and as a necessary phase in the economic development of society." (Capital 1:344)

At first glance there can be no doubt that Marx was more on the side of enlightenment and its enthusiasm for science, as the following statement, reported by Wilhelm Liebknecht, shows:

Soon we were on the field of Natural Science,
and Marx ridiculed the victorious reaction in

88. Note that even if the social sciences could do away with the 'opacity' of society, this would nevertheless remain a knowledge of experts. However, Marx assumed a "withering away of the social sciences", cf. Cohen (1978:326-344)

Europe that fancied it had smothered the revolution and did not suspect that Natural Science was preparing a new revolution. That King Steam who had revolutionised the world in the last century had ceased to rule, and that into his place a far greater revolutionist would step, the electric spark. And now Marx, all flushed and excited told me that during the last few days the model of an electric engine drawing a railroad train was on exhibition in Regent Street. 'Now the problem is solved - the consequences are indefinable. In the wake of the economic revolution the political must necessarily follow...(Cited in Selucky 1979:219)

But on the other hand Marx acknowledges the romantic standpoint as a legitimate criticism of capitalism:

In earlier stages of development the single individual seems to be developed more fully, because he has not yet worked out his relationships in their fullness, or erected them as independent social powers and relations opposite himself. It is as ridiculous to yearn for a return to that original fullness as it is to believe that with this complete emptiness history has yet come to a standstill... The bourgeois viewpoint has never advanced beyond this antithesis between itself and this romantic viewpoint, and therefore the latter will accompany it as legitimate antithesis up to its blessed end. (Grundrisse:162, my emph.)⁸⁹

89. In the Communist Manifesto we find an even more positive judgement regarding the Utopian Socialists: "But these socialist and communist publications contain also a critical element. They attack every principle of existing society. Hence they are full of the most valuable materials for the enlightenment of the working class." (CW 6:515)

Charles Taylor concluded from this ambiguity that Marx wanted to reach the goals of romanticism with the means of scientific enlightenment. To cite Taylor:

What we see from the young to the mature Marx is not a change of view but a shift of emphasis within what to him must have appeared as fundamentally the same position. In the climate of the late nineteenth century it was naturally the dimension of 'scientific socialism' which tended to predominate... Later commentators have been right to point out the rift between Marx's expressivism and his scientism. But this is not a difference between the young and the mature Marx. Rather his inability to see this rift was already implicit in his original position, in the transposition onto man of Hegel's self-positing 'Geist'. (Taylor 1975: 552)

When Marx envisages the reduction of the working day to a minimum which would facilitate the individuals' artistic and scientific education, he combines these two elements which are crucial to his image of human nature and which have been divided in the history of mankind. We may illustrate the two strands with Schiller and Saint-Simon. Schiller's favoured candidate for universalizing human values, for bringing harmony to society was art, because "all other forms of imagination [Vorstellung] divide society in referring only to the differences between man and man. Only the aesthetic communication [schöne Mitteilung] unifies the society, because it refers to things common to everyone." (cited in Habermas 1985:63, my transl.)

Saint Simon, in contrast, attributes this role to science. As he wrote in his "Letter from an Inhabitant of Geneva": [T]here is but one interest common to the whole of humanity, the progress of the sciences." (1952:9)

The shortening of the working day is the conditio sine qua non for either of the two prospects. It is, according to Marx, made possible by means of science and technology, but not set into practice due to capitalist relations. And here we come to Marx's reductionism "in the last instance": He held the view that the puzzling strands of modern society run together in the institution of private property. Once this has been abolished, the "riddle of history" will have been solved. In addition to the objections above I want to add the following:

- (i) there are alienating effects in modern society which do not stem from private property. Marx himself was aware of religion and the state (see Elster 1985:100). But, as we saw above, Marx could not have included technology.
- (ii) it is doubtful if a single point in society exists, where all main problems/contradictions crystallize;
- (iii) it is doubtful that in the absence of a 'center of society', these alienating effects can be superseded by conscious human action. Social complexity may constitute a severe barrier for social planning.

The main conclusion of this essay is then, that Marx's reduction of all problems to the concept of capitalist production is an insufficient one; but his theory also provides a kind of 'corrective' to this: in his concern about the 'enslaving effects' of all kinds of objectifications. It is this element of his theory which has proven to be the inspiring source for almost every modern critical enterprise. It is the categorical imperative which informed his own life-long efforts: "The criticism of religion ends with the teaching that man is the highest being for man, hence with the categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being."⁹⁰

90. Contribution to the Critique of Hegel's Philosophy of Law, CW 3:182)

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